ABSTRACT OF THE DISCLOSURE

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A data detection circuit within a global positioning system (GPS) satellite receiver operates to detect and decode data sent in a spread spectrum signal. The data detection circuit receives input from a radio receiver, the information containing data from a plurality of satellites. The data is supplied to a circular memory device, which determines which data corresponds to which satellite. The memory device sends the received signal to a matched filter, which decodes the signal received from each satellite. This signal is analyzed to determine whether a phase inversion due to data modulation on the received signal is present. The phase inversion can occur at boundaries, known as data epochs, in the received signal, and corresponds to data in the received signal. This data contains information relating to the position of each satellite and is collected by the data detection circuit for use by the GPS receiver.

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